

SYSTEM AND METHOD FOR HOLE FILLING
IN 3D MODELS

ABSTRACT OF THE DISCLOSURE

5 A method for hole-filling in 3D models includes
identifying vertices adjacent to hole boundaries in a mesh
of points on a digital image and constructing a signed
distance function based on vertices adjacent to hole
boundaries. A Radial Basis Function is fit based on the
10 constructed signed distance function and evaluated on a
grid, which include the hole. The points on the hole
surface are extracted and meshed to fill the hole.